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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/756,467 | 01/08/2001 | Kevin D. Eichelberger | DEKA:260US/MBW | 7312 |

7590

12/03/2003

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| EXAMINER |
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FOX, DAVID T

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| ART UNIT | PAPER NUMBER |
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1638

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|--|--|
| Office Action Summary | Application No. 09/756,467 | Applicant(s) EICHELBERGER, KEVIN D. | |
| | Examiner David T. Fox | Art Unit 1638 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 and 10-21 is/are allowed.
- 6) ☒ Claim(s) 9, 22-23 and 25-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

Art Unit: 1638

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Applicant's amendment of 18 August 2003 has obviated the enablement rejection regarding the deposit. Claims 1-23 and 25-28 are pending.

Claims 9, 22-23 and 25-28 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, as stated on pages 3-5 of the last Office action for claims 9 and 22-28.

Claims 9, 22-23 and 25-28 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, as stated in the last Office action on pages 6-8 for claims 9 and 22-28.

Claims 9 and 25-28 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, as stated on pages 8-9 of the last Office action.

The claims remain free of the prior art, as stated on page 10 of the last Office action.

Claims 1-8 and 10-21 are allowed.

Applicant's arguments filed 18 August 2003, insofar as they pertain to the rejections above, have been fully considered but they are not persuasive.

Applicant urges that the written description rejection is improper, given the definition of single gene conversion plants in the specification, the failure of the claims to claim undiscovered genes, the availability of various transgenes or individual introgressable genes including male sterility genes, the availability of techniques for introducing single genes via introgression or transformation, the adequate description of hybrids as possessing one-half of the genetic complement of the claimed inbred, and the description of a particular hybrid in the specification.

The Examiner maintains that the claims do in fact encompass undiscovered genes in their recitation of genes for "yield enhancement", "improved nutritional quality" and "enhanced yield stability". Furthermore, although other individual transgenes may be described, inbred plants into which they have been introgressed have not been described. The description of the exemplified inbred prior to introgression, wherein said inbred possesses a unique genetic complement which causes a unique collection of morphological traits, does not provide an adequate written description of a multitude of plants obtained by crossing the inbred with another plant containing a particular gene of interest and various other uncharacterized genes which would be transmitted as well via linkage drag. The claims do not specify the number of generations of backcrossing back to the original inbred, with selection for the gene of interest as well as the collection of traits of the original inbred.

Regarding hybrids, the Examiner maintains that the claims read on a multitude of hybrids produced by crossing the exemplified inbred line with a multitude of uncharacterized second parents. The hybrid offspring would possess a multitude of divergent morphological traits, not present in the original inbred or in each other. The presence of 50% of the genome of the exemplified inbred does not adequately describe these plants, since their divergent collection of morphological traits cannot be correlated with any conserved structure (gene sequence), as mandated by MPEP 2163.

Applicant urges that the enablement rejection is improper, given the failure of the cited references to teach maize breeding, and Applicant's exemplification of a single gene conversion plant followed by seven backcrosses.

The Examiner maintains that the cited references teach that linkage drag occurs in three unrelated plant species. A subsequent survey of the prior art has not recovered any plant species in which linkage drag does not occur. Thus, one skilled in the art would expect it to occur in maize as well. Although Applicant may have utilized seven backcrosses to obtain a particular single gene conversion plant, the claims are not so limited.

Applicant urges that the indefiniteness rejection is improper, given the proper structure of the dependent claims which incorporate all of the characteristics of the independent claim, and then add a new characteristic. The Examiner disagrees with this characterization. For example, claim 8 is drawn to a corn plant which is inherently male fertile. Claim 9 is drawn to a corn plant which is male sterile. Thus, claim 9 does not incorporate all of the characteristics of the claim from which it depends.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

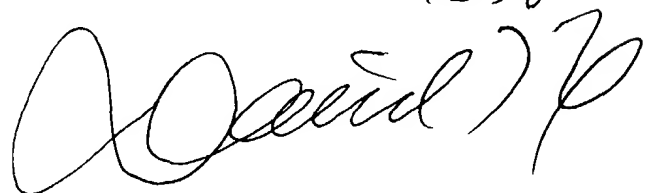
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on (703) 306-3218. The fax phone number for this Group is (703) 872-9306. The after final fax phone number is (703) 872-9307.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

November 28, 2003

DAVID T. FOX
PRIMARY EXAMINER
GROUP 180-1638

A handwritten signature in cursive script, appearing to read "David T. Fox", with a large, stylized flourish at the end.